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**CERTIFICATE OF MAILING**

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Signature: \_\_\_\_\_

*Rebecca A. Baumann*

**PATENT**

**Attorney Docket No. NTI-025**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application )

PATENT APPLICATION

Inventor(s): Chi-Ming Tsai )

Art Unit: 2123

Application No.: 10/025,414 )

Examiner: unknown

Filed: 12/18/2001 )

Title "Method For Providing Flexible And Dynamic  
Reporting Capability Using Simulation Tools" )

**RECEIVED**

**AUG 26 2002**

**Technology Center 2100**

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Listed below or on an attached Form PTO-1449 is information known to applicant(s). A copy of each listed publication and U.S. and foreign patent, except for pending U.S. applications, is being submitted herewith, along with a concise explanation of information in a foreign language, if any, pursuant to 37 C.F.R. §1.97-1.98.

Applicants respectfully request that the listed information be considered by the Examiner and be made of record in the above-identified application. If form PTO-1449 is enclosed, the Examiner is requested to initial and return it in accordance with MPEP § 609.


This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56.

- ☒ This statement qualifies under 37 C.F.R. § 1.97, subsection (b) because (check all that apply):
- ☐ (1) It is being filed within 3 months of the application filing date and is other than a continued prosecution application under § 1.53(d)  
-- OR --
  - ☐ (2) It is being filed within 3 months of entry of a national stage  
-- OR --
  - ☒ (3) It is being filed before the mail date of the first Office Action on the merits.  
-- OR --
  - ☐ (4) It is being filed before the mailing of a first Office Action after the filing of a request for continued examination under § 1.114
- ☐ 37 C.F.R. § 1.97(c). If this statement is being filed after the period specified in § 1.97(b), but before the mailing date of the earlier of a final office action under § 1.113, a notice of allowance under § 1.311, or an action that otherwise closes prosecution in the application, then:
- ☐ a certification as specified in § 1.97(e) is provided below; **or**
  - ☐ a fee of \$180.00 as set forth in § 1.17(p) is authorized below, enclosed, or included with the payment of other papers filed together with this statement.
- ☐ 37 C.F.R. § 1.97(d). If this statement is being filed after the period specified in § 1.97(c), but on or before payment of the issue fee, then:
- A. a certification as specified in § 1.97(e) is completed below; **and**
  - B. a fee of \$180.00 as set forth in § 1.17(p) is authorized below, enclosed, or included with the payment of other papers filed together with this statement.
- ☒ **Fee Authorization.** The Commissioner is hereby authorized to charge any additional fees or credit any overpayment associated with this communication to Deposit Account No. 50-0574 (Docket No. NTI-025).


Respectfully submitted,

BEVER, HOFFMAN & HARMS, LLP

Dated: 8-19-02

By:   
Jeanette S. Harms, Reg. No. 35,537

Telephone: (408) 451-5907  
Customer No. 29477

<b>INFORMATION DISCLOSURE CITATION</b>  <b>PTO-1449</b>		<b>Atty. Docket No.</b> NTI-025		<b>Serial No.</b> 10/025,414-4802		
		<b>Applicant</b> TSAI, Chi-Ming		<b>Group</b> 2123		
		<b>Filing Date</b> 12/18/2001		<b>RECEIVED</b> AUG 26 2002 Technology Center 2100		
<b>U.S. PATENT DOCUMENTS</b>						
<b>EXAMINER'S INITIALS</b>	<b>PATENT NO.</b>	<b>DATE</b>	<b>NAME</b>	<b>CLASS</b>	<b>SUBCLASS</b>	<b>FILING DATE</b>
	5,801,954	9/1/1998	Le, et al.	364	488	4/24/1996
	6,081,659	6/27/2000	Garza, et al.	395	500.22	4/26/1999

EXAMINER: \_\_\_\_\_

Date Considered: \_\_\_\_\_


EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>INFORMATION DISCLOSURE</b> <b>CITATION TYPE</b> <b>PTO-1449</b>		<b>Atty. Docket No.</b> NTI-025  <b>Applicant</b> TSAI, Chi-Ming  <b>Filing Date</b> 12/18/2001		<b>Serial No.</b> 10/025,414-4802  <b>Group</b> 2123		<b>RECEIVED</b> <b>AUG 26 2002</b> <b>Technology Center 2100</b>	
<b>FOREIGN PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 00/67075 A1	11/9/2000	WO			<input type="checkbox"/>	<input type="checkbox"/>
	WO 00/67076 A1	11/9/2000	WO			<input type="checkbox"/>	<input type="checkbox"/>
	WO 99/14638 A1	3/25/1999	WO			<input type="checkbox"/>	<input type="checkbox"/>

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<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
EXAMINER'S INITIALS	CITATION		
	Cai, L., et al., "Enhanced Dispositioning of Reticle Defects Using the Virtual Stepper with Automated Defect Severity Scoring", Numerical Technologies, Inc., Advanced Micro Devices, Inc., pp. 1-12.		
	Ronse, K., et al., "Thin Film Interference Effects in Phase Shifting Masks Causing Phase and Transmittance Errors", IMEC (15 pages).		
	Casey, Jr., J.D., et al., "Chemically Enhanced FIB Repair of Opaque Defects on Molybdenum Silicide Photomasks", SPIE, Vol. 3236, pp. 487-497 (1997).		
	Henke, W., et al., "A Study of Reticle Defects Imaged Into Three-Dimensional Developed Profiles of Positive Photoresist Using the Solid Lithography Simulator", Microelectronics Eng., Vol. 14, pp. 283-297 (1991).		
	Ham, Y.M., et al., "Dependence of Defects in Optical Lithography", Jpn. J. Appl. Phys., Vol. 31, pp. 4137-4142 (1992).		
	Watanabe, H., et al., "Detection and Printability of Shifter Defects in Phase-Shifting Masks II Defocus Characteristics", Jpn. J. Appl. Phys., Vol. 31, pp. 4155-4160 (1992).		
	Nistler, J., et al., "Phase Shift Mask Defect Printability Analysis", Proceedings Of The Microlithography Seminar INTERFACE '93, OCG Microelectronic Materials, Inc., pp. 11-28 (1993).		
	Spence, C., et al., "Automated Determination of CAD Layout Failures Through Focus: Experiment and Simulation", SPIE, Vol. 2197, pp. 302-313 (1994).		
	Karklin, L., "A Comprehensive Simulation Study of the Photomask Defects Printability", SPIE, Vol. 2621, pp. 490-504 (1995).		
	Gans, F., et al., "Printability and Repair Techniques for DUV Photomasks", SPIE, Proceedings Of The 17th Annual Symposium On Photomask Technology And Management, Vol. 3236, pp. 136-141 (1997).		
	Ibsen, K., et al., "Clear Field Reticle Defect Disposition for Advanced Sub-Half Micron Lithography", SPIE, Proceedings Of The 17th Annual Symposium On Photomask Technology And Management, Vol. 3236, pp. 124-135 (1997).		
	Tsujiimoto, E., et al., "Hierarchical Mask Data Design System (PROPHET) for Aerial Image Simulation, Automatic Phase-Shifter Placement, and Subpeak Overlap Checking", SPIE, Vol. 3096, pp. 163-172 (1997).		
	Gordon, R., et al., "Design and Analysis of Manufacturable Alternating Phase-Shifting Masks", Bacus News, Vol. 14, Issue 12, pp. 1-9, December 1998.		
	Chen, et al., "ArF (193nm) Alternating PSM Quartz Defect Repair and Printability for 100nm Node", BACUS Photomask Technology, September 21, 2001 (20 pages).		

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